WHAT IS CLAIMED IS:

1.   A block forming method whereby a digital bit stream consisting of a plurality of packets having a same length is converted into a data block and at least a main data portion in which a plurality of complete packets and partial packets consisting of only partial data can be arranged and an additional data portion in which additional data of each of said complete packets in said main data portion and additional data of one partial packet are stored are formed in said data block, comprising the steps of:

     when a space area smaller than one packet occurs in an end portion of said main data portion, storing a part of the data of a next packet into said space area, storing additional data of said next packet into said additional data portion as additional data of said one partial packet, and storing remaining data of the part of the data of said next packet into a start portion of the main data portion of a next data block; and

     when said space area does not occur in the end portion of said main data portion, storing additional data invalid information showing that the additional data of said one partial packet is invalid into a portion other than said main data portion in said data block.

2.   A method according to claim 1, wherein said additional data invalid information is a flag which is arranged in a portion other than said main data portion and said additional data portion in said data block.

3.   A method according to claim 1, wherein said additional data

invalid information is a flag which is arranged in said additional data portion in said data block.

4. A block forming method whereby a digital bit stream consisting of a plurality of packets having a same length is converted into a data block and at least a main data portion in which a plurality of complete packets and partial packets consisting of only partial data can be arranged and an additional data portion in which additional data of each of said complete packets in said main data portion is stored are formed in said data block, comprising the steps of:

when a space area smaller than one packet and larger than a size of additional data occurs in an end portion of said main data portion, storing a part of the data of a next packet into said space area, storing the additional data of said next packet into said additional data portion as additional data of the part of the data of the next packet together with the additional data of each of said complete packets, and storing remaining data of the part of the data of said next packet into a start portion of the main data portion of a next data block; and

when a space area smaller than the size of additional data occurs in the end portion of said main data portion, storing information showing that no partial packet exists in the end portion of said main data portion into a portion other than said main data portion and said additional data portion in said data block.

5. A method according to claim 4, wherein padding data in which each bit indicates zero is inserted into the space area

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smaller than the size of additional data of the end portion of said main data portion.

6.   A block forming apparatus in which a digital bit stream consisting of a plurality of packets having a same length is converted into a data block and at least a main data portion in which a plurality of complete packets and partial packets consisting of only partial data can be arranged and an additional data portion in which additional data of each of said complete packets in said main data portion and additional data of one partial packet are stored are formed in said data block, comprising:

    discriminating means for discriminating whether a space area smaller than one packet has occurred in an end portion of said main data portion or not; and

    block processing means for when the space area smaller than one packet occurs in the end portion of said main data portion, storing a part of the data of a next packet into said space area, storing additional data of said next packet into said additional data portion as additional data of said one partial packet, and storing remaining data of the part of the data of said next packet into a start portion of the main data portion of a next data block,

    wherein when said space area does not occur in the end portion of said main data portion, said block processing means stores additional data invalid information showing that the additional data of said one partial packet is invalid into a portion other than said main data portion in said data block.

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7.   An apparatus according to claim 6, wherein said additional data invalid information is a flag which is arranged in a portion other than said main data portion and said additional data portion in said data block.

8.   An apparatus according to claim 6, wherein said additional data invalid information is a flag which is arranged in said additional data portion in said data block.

9.   A block forming apparatus in which a digital bit stream consisting of a plurality of packets having a same length is converted into a data block and at least a main data portion in which a plurality of complete packets and partial packets consisting of only partial data can be arranged and an additional data portion in which additional data of each of said complete packets in said main data portion is stored are formed in said data block, comprising:

     means for discriminating whether a space area smaller than one packet and larger than a size of additional data has occurred in an end portion of said main data portion or not; and

     block processing means for when said space area smaller than one packet and larger than the size of additional data occurs in the end portion of said main data portion, storing a part of the data of a next packet into said space area, storing the additional data of said next packet into said additional data portion as additional data of the part of the data of the next packet together with the additional data of each of said complete packets, and storing remaining data of the part of the data of said next packet into a start portion of the main data

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portion of a next data block,

wherein when a space area smaller than the size of additional data occurs in the end portion of said main data portion, said block processing means stores information showing that no partial packet exists in the end portion of said main data portion into a portion other than said main data portion and said additional data portion in said data block.

10. An apparatus according to claim 9, wherein padding data in which each bit indicates zero is inserted into the space area smaller than the size of additional data of the end portion of said main data portion.